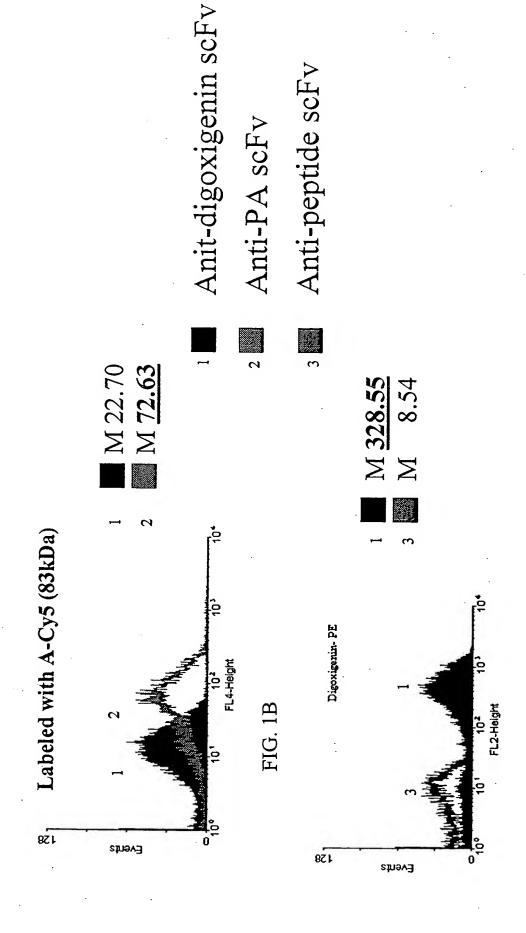
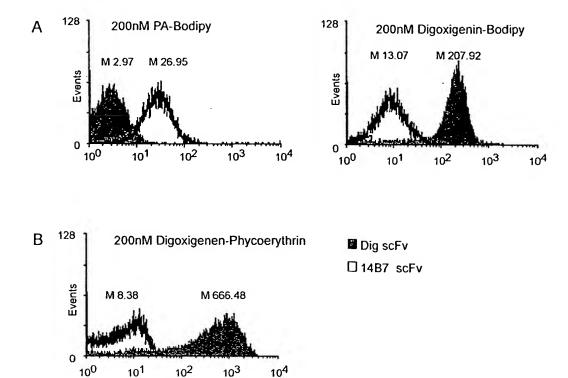
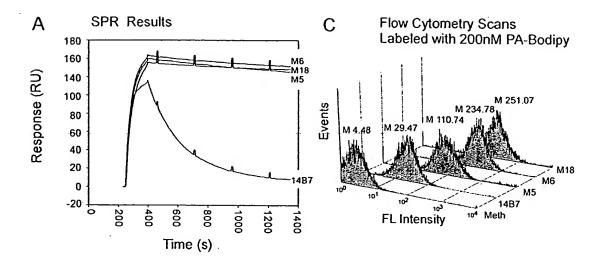
FIG. 1A

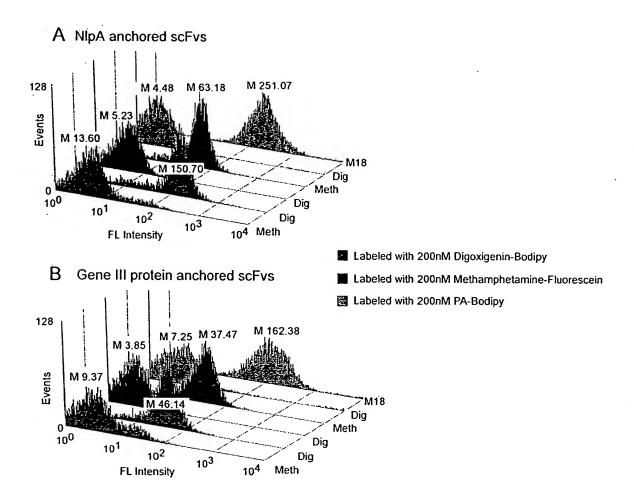






B Affinity Measurements of Purified scAb

Antibody	Kd (pM)	kon(1/Ms)	koff (1/s)	Mutations
14B7	4300	7.1x10 ⁵	3.0x10 ⁻³	
M5	96	1.1x10 ⁶	1.1x10 ⁻⁴	(light: Q38R,Q55L,S56P,T74A,Q78L,heavy: K62R)
M6	69	1.2x10 ⁶		(light: S22G,L33S,Q55L,S56P,Q78L,L94P,heavy: S7P,K19R,S30N,T68I,M80L)
M18	35	1.2x10 ⁶		(light: I21V,L46F,S56P,S76N,Q78L,L94P,heavy: S30N,T57S,K64E,T68I)



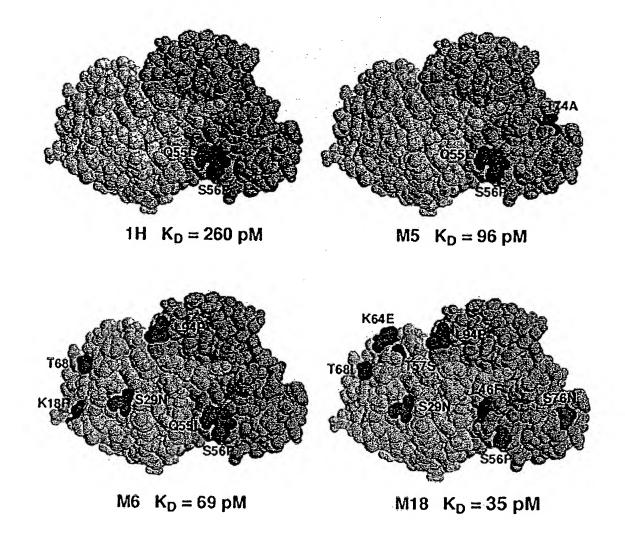


FIG. 5

Variable Light

1487scfv DIQMTQTTSSLSASLGDRYTISCRASQDIRNYLNWYQQKPDGTVKLLIYYTSRLQSGVPSRFSGSGSGTDYSLTISNQEQEDIGTYFCQQGNTLPWTFGGGTKLEIKR M18scfv DIQMTQTTSSLSASLGDRYTVSCRASQDIRNYLNWYQQKPDGTVKFLIYYTSRLQPGVPSRFSGSGSGTDYSLTINNLEQEDIGTYFCQQGNTPPWTFGGGTKLEIKR

Variable Heavy

14B7scFv EVQLQQSGPELVKPGASVKISCKDSGYAFSSSWMNWVKQRPGQGLEWIGRIYPGDGDTNYNGKFKGKATLTADKSSSTAYMQLSSLTSVDSAVYFCARSGLLRYAMDYWGQGTSVTVSS M18scFv EVQLQQSGPELVKPGASVKISCKDSGYAFNSSWMNWVKQRPGQGLEWIGRIYPGDGDSNYNGKFEGKALTADKSSSTAYMQLSSLTSVDSAVYFCARSGLLRYAMDYWGQGTSVTVSS